



JC03 Rec'd PCT PTO 03 MAY 2005

#4

PCT

PATENT
ATTORNEY DOCKET NO.: 046124-5322

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Akira OHBA et al.

U.S. Application No.: 10/508,793

International Appln. Filing Date: March 20, 2003

Date of National Stage Entry: September 21, 2004

Group Art Unit: Unassigned

Examiner: Unassigned

For: X-RAY IMAGE MAGNIFYING DEVICE

Commissioner for Patents
U.S. Patent and Trademark Office
Customer Window, MAIL STOP PCT
Alexandria, VA 22314

**RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS
UNDER 35 U.S.C. § 371 IN THE U.S. DESIGNATED/ELECTED OFFICE (DO/EO/US)**

1. This replies to the Notification of Missing Requirements (Form PCT/DO/EO/905) mailed March 23, 2005.

A copy of the Notification of Missing Requirements (Form PTC/DO/EO/905) is enclosed.

2. Declaration Or Oath

- ☒ No declaration or oath was filed. Enclosed is the original Combined Declaration and Power of Attorney.
- ☐ The specification attached to the declaration is a copy of the specification and any amendments thereto which were filed in the PTO to obtain the filing date.
- ☐ The declaration or oath which was filed was determined to be defective. A new original Combined Declaration and Power of Attorney is attached.

3. 3. English Translation of Non-English Language Papers

☐ Submitted herewith is a verified English translation of the non-English language application papers as originally filed. It is requested that this translation be used as the copy for examination purposes in the PTO.

☐ Also enclosed is the Verification of Translation Document

4. Small Entity Statement(s)

☐ Applicant(s) hereby assert small entity status.

5. Fee Calculation

Basic National Stage Fee:				
\$300.00				
	Number Filed	Number Extra	at a Rate of	
Total Claims	3-20 =	0	\$50.00 each=	+\$
Independent Claims	1- 3 =	0	\$200.00 each=	+\$
Multiple dependent claim(s), if any			\$360.00	+\$
Missing Requirements Surcharge Fee			\$130.00	\$130.00
Application Size Fee				
\$250.00 for each additional 50 sheets that exceeds 100				\$
Application Search Fee			\$500.00	\$
Examination Fee			\$200.00	\$
SUB-TOTAL =				\$130.00
Fee For Application Filed With A Non-English Specification (37 C.F.R. § 1.17(k) and § 1.52(d))			\$130.00	+\$0.00
Fee For Processing and retention of application (37 C.F.R. § 1.21(l) and § 1.53(d))			\$130.00	+\$
TOTAL FILING FEE =				\$130.00

6. Extension of Time

The proceedings herein are for a patent application and the provisions of 37 C.F.R. § 1.136(a) apply.

- ☐ Applicants petition for an extension of time, the fees for which are set out in 37 C.F.R. §§ 1.17(a)-(d), for the total number of months checked below:

	<u>Total Months Requested</u>	<u>Extension Fee</u>	<u>Extension Fee [Small Entity]</u>
<input type="checkbox"/>	One month	\$120.00	\$60.00
<input type="checkbox"/>	Two months	\$450.00	\$225.00
<input type="checkbox"/>	Three months	\$1,020.00	\$510.00
<input type="checkbox"/>	Four months	\$1,590.00	\$795.00
<input type="checkbox"/>	Five months	\$2,160.00	\$1,080.00

Extension of time fee due with this request: \$

If an additional extension of time is required, please consider this a Petition therefor.

- ☒ Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

7. Fee Payment

The total fee due is:

Completion Fees	<u>\$130.00</u>
Assignment Fees	<u>\$40.00</u>
Total Fee Due	<u>\$170.00</u>

05/06/2005 MKAYPAGH 00000067 500310 10508793
01 FC:1617 130.00 DA

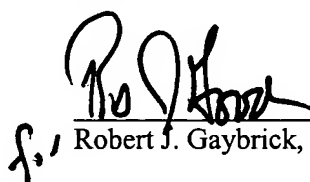
- ☒ The Commissioner is hereby authorized to charge the total fee due to Deposit Account 50-0310.
- ☒ **Except** for issue fees payable under 37 C.F.R. §1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R §1.16 and §1.17 which may be required, or credit any overpayment to Deposit Account No. 50-0310.

8. Additional papers enclosed.

- ☒ Form PCT/IPEA/409 International Preliminary Examination Report
- ☐ Preliminary Amendment
- ☐ PCT/IB/338 English translation of the International preliminary Examination Report
- ☒ Information Disclosure Statement
- ☒ Form PTO-1449, 4 documents as listed
- ☐ Declaration of Biological Deposit
- ☐ Submission of "Sequence Listing", computer readable copy and/or amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence.

Respectfully submitted,

MORGAN, LEWIS & BOCKIUS LLP

 *Robert J. Gaybrick*
f. Robert J. Gaybrick, Reg. No. 27,890

Date: May 3, 2005

Customer No. 09629

MORGAN, LEWIS & BOCKIUS LLP

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Washington, D.C. 20004

Telephone: (202) 739-3000

Facsimile: (202) 739-3001



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Teei

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/508,793	Akira Ohba	046124-5322

INTERNATIONAL APPLICATION NO.
PCT/JP03/03452

09629

MORGAN LEWIS & BOCKIUS LLP

1111 PENNSYLVANIA AVENUE NW

WASHINGTON, DC 20004

Case 46124-5322
Due Date 5/23/05
Action Missing
By LF Chk W

I.A. FILING DATE	PRIORITY DATE
03/20/2003	03/22/2002

CONFIRMATION NO. 3905
371 FORMALITIES LETTER
OC000000015536112
OC000000015536112

Date Mailed: 03/23/2005

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 09/21/2004
- English Translation of the IA filed on 09/21/2004
- Copy of the International Search Report filed on 09/21/2004
- Copy of IPE Report filed on 09/21/2004
- U.S. Basic National Fees filed on 09/21/2004
- Priority Documents filed on 09/21/2004

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- \$130 Surcharge for providing the oath or declaration later than 30 months from the priority date (37 CFR 1.492(e)) is required.

SUMMARY OF FEES DUE:

Total additional fees required for this application is \$130 for a Large Entity:

- \$130 Late oath or declaration Surcharge.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

MAR 28 2005

MORGAN, LEWIS & BOCKIUS LLP

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

JOHN L ANDERSON

Telephone: (703) 308-9140 EXT 211

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/508,793	PCT/JP03/03452	046124-5322

FORM PCT/DO/EO/905 (371 Formalities Notice)

PATENT

ATTORNEY DOCKET NO.: 046124-5322

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
)	
Akira OHBA et al.)	
)	
Application No.: 10/508,793)	Group Art Unit: Unassigned
)	
Filed: September 21, 2004)	Examiner: Unassigned
)	
For: X-RAY IMAGE MAGNIFYING DEVICE)	

Commissioner for Patents
U.S. Patent and Trademark Office
Alexandria, VA 22314

Sir:

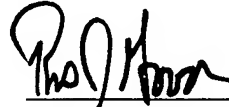

**SUBMISSION OF INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

A translation of an International Preliminary Examination Report ("IPER") issued in corresponding PCT/JP03/03452 is attached. Applicants respectfully request that the Examiner consider the IPER as it relates to the above-identified application.

Respectfully submitted,

MORGAN, LEWIS & BOCKIUS LLP

Dated: May 3, 2005
Customer No. 009629
MORGAN, LEWIS & BOCKIUS LLP
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
(202) 739-3000

 **Robert J. Goodall**
 **Reg. No. 41,040**
Robert J. Gaybrick, Reg. No. 27,890

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

PCT Application
PCT/JP2003/003452



Applicant's or agent's file reference FP03-0052-00	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/JP03/03452	International filing date (day/month/year) 20 March 2003 (20.03.03)	Priority date (day/month/year) 22 March 2002 (22.03.02)
International Patent Classification (IPC) or national classification and IPC G21K 7/00, G01N 23/04		
Applicant HAMAMATSU PHOTONICS K.K.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet. <input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of _____ sheets.
3. This report contains indications relating to the following items: I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 20 March 2003 (20.03.03)	Date of completion of this report 02 October 2003 (02.10.2003)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP03/03452

I. Basis of the report

1. With regard to the elements of the international application:*

- ☒ the international application as originally filed
- ☐ the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the claims:
pages _____, as originally filed
pages _____, as amended (together with any statement under Article 19
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the drawings:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/JP 03/03452

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-3	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-3	NO
Industrial applicability (IA)	Claims	1-3	YES
	Claims		NO

2. Citations and explanations

Claims 1-3

Document 1: JP 4-265900 A (Nikon Corp.), 22 September 1992, entire text, all drawings, (Family: none)

Document 2: JP 9-251100 A (Olympus Optical Co., Ltd.), 22 September 1997, entire text, all drawings, (Family: none)

Document 3: JP 9-178900 A (Olympus Optical Co., Ltd.), 11 July 1997, entire text, all drawings, (Family: none)

Document 4: JP 7-243993 A (Hamamatsu Photonics Kabushiki Kaisha), 19 September 1995, entire text, all drawings, (Family: none)

Document 1 discloses a feature wherein an image-forming type soft X-ray microscope device, which comprises an elliptic rotary reflection mirror (9) that is configured from a multi-layer film, a zone plate (14) for collecting the X-rays from the object (13) and forming an image of the object, and a two-dimensional X-ray imaging element (15) for detecting the image of said object, is provided with an optical microscope that reflects the light from the illuminating light source (22) by means of

a reflection mirror (24) with angled holes formed therein, which is positioned in the vicinity of the object lens (23). In addition, document 1 also indicates that a detector such as a CCD, which is sensitive to visible light as well as X-rays, can be used as the two-dimensional X-ray imaging element (15).

Document 1 does not indicate that the imaging magnification of the X-ray image is adjusted by moving at least one component from among the X-ray image detection means, the sample material and the illuminating optical system along the optical axis in this device; however, document 2 discloses a soft X-ray microscope wherein the imaging magnification is changed by moving the detector (10) along the optical axis in order to change the distance between the detector (10) and the zone plate-type objective lens (9), and document 3 discloses an X-ray observation device that is equipped with a structure for changing the distance between the sample material and the X-ray optical system.

Furthermore, the provision of a second X-ray reflection means in addition to the first X-ray reflection means, as disclosed in document 4, is merely a design matter that can be configured by a person skilled in the art as necessary.